



December 20, 2011

CULLIGAN WATER  
JIM LUEDTKE  
2200 PIONEER AVENUE  
RICE LAKE WI 54868

CONCOR TOOL AND MACHINE INC.  
TIM CONNER  
9665N CONCOR ROAD  
HAYWARD WI 54543

Re: Description: WATER TREATMENT DEVICE - SITE SPECIFIC/COMMERCIAL  
Manufacturer: CONCOR TOOL AND MACHINE INC.  
Product Name: CONCOR TOOL AND MACHINE INC.  
Model Number(s): COPPER/LEAD CORROSION CONTROL USING CHEMICAL INJECTION OF SODIUM CARBONATE (SODA ASH)  
Product File No: 20110373

The specifications and/or plans for this water treatment chemical injection system have been reviewed and determined to be in compliance with chapters SPS 382 through 384, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an approval based on the Wisconsin Statutes and the Wisconsin Administrative Code. This approval is valid until the end of December 20, 2013.

This approval is contingent upon compliance with the following stipulation(s):

- The chemical injection pump has undergone sufficient testing to document the device's ability to properly inject a chemical into a water supply system as specified in this approval letter.
- For buildings not served by a municipal water supply, Department of Natural Resources (DNR) written approval may be required prior to installation of this product to inject a chemical into a water supply system. For more information contact the DNR Private Water Systems Section, P.O. Box 7921, Madison, WI 53707, telephone (608) 266-3415.
- The water service and water distribution piping in this facility may be undersized. This may cause excessive water velocities within the water supply system which in turn may result in erosion corrosion. The maximum water velocity permitted is 8 feet per second (fps). This type of corrosion may be further exacerbated by the presence of entrained gasses and/or particulate matter. For this reason, the addition of sodium carbonate alone may not be sufficient to mitigate the existing corrosion problem at this facility and the situation should be closely monitored.

No changes to the water supply system were requested because the installation of the chemical injection system has a negligible effect on the pressure and flow characteristics of the existing system.

- The sodium carbonate (aka soda ash) injected into this water supply system shall conform to NSF Standard 60 and shall not exceed its listed maximum use concentration. The maximum use concentration of "Soda Ash 100" manufactured by FMC Corporation is 150 mg/l. Cross connection control is optional.
- No bypass piping shall be installed on the chemical injection system.
- All water distribution piping shall be marked as required by SPS Table 82.40-1a.

- The finished installation must undergo a final inspection prior to the treated water being used for consumptive purposes. The Plumbing Consultant having jurisdiction in this area is Don Hough. Mr. Hough can be reached via the following:

Phone: 715-634-4804  
E-mail: [donald.hough@wi.gov](mailto:donald.hough@wi.gov)

If the treated water is used for consumptive purposes prior to passing the final inspection, then this approval may be rendered null and void and the devices ordered removed. The Plumbing Consultant shall provide a written indication of the results of the final inspection to the system owner.

When the final inspection has been passed, the Plumbing Consultant will notify the Wisconsin Department of Natural Resources (WDNR) Field Staff having authority over the well. The WDNR will then monitor the quality of the treated water to its satisfaction. Monitoring advice, which the WDNR is free to accept or reject, is provided elsewhere in this letter. The WDNR Field Staff having authority over this well is Christian Martinez. Mr. Martinez can be contacted via the following:

Phone: 715-685-0430  
E-mail: [Christian.Martinez@Wisconsin.gov](mailto:Christian.Martinez@Wisconsin.gov)

- The suggested monitoring interval for this installation is monthly. The following tests should be performed:
  1. Dissolved lead;
  2. dissolved copper;
  3. pH
  4. Alkalinity

The water quality samples should be collected at a time of day when the chemical injection system is as close to peak demand as possible. Untreated and treated water samples should be collected together in sets, the untreated samples taken upstream of all water treatment devices and the treated samples from the most remote outlet.

It is important that the monitoring of these systems be continued on an ongoing basis because the water supply piping may be undersized and water velocities within the system excessive.

- Any wall hydrant that is not served by these arsenic treatment devices must have one, or more, of the following:
  - a. The handles of the hydrant shall be removed;
  - b. The hydrant shall be capped and sealed using solder; or
  - c. Signage shall be posted immediately above the hydrant indicating the water is unfit for human consumption

The department is in no way endorsing this product or any advertising, and is not responsible for any situation which may result from its use.

Sincerely,

Glen W. Schlueter  
Engineering Consultant-Plumbing Product Reviewer  
Bureau of Integrated Services  
Safety and Buildings Division  
Department of Safety and Professional Services  
(608) 267-1401 **Phone**  
(608) 267-9566 **Fax**  
[glen.schlueter@wi.gov](mailto:glen.schlueter@wi.gov) **Email**  
8:00AM – 4:30PM CT **Work Hours**  
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